Original



NCR GmbH

BASIC SITE PREPARATION DATA

Spezifikation/Specification	017-0025298
Änderung Revision	A

NCR 7646	FLEXIBLE DISK RECORDER	Code

Spez. Änderg. Spec. Revision	Beschreibung Description					Gesehen Approval	Datum Date
	Für die Fertigung freigegeben Released for Production	**Freigebende Fabrik** Control Plant — **Code** 17	**Ort** AUGSBURG	**Erstellt von** Prepared by H. Böck	**Datum** Date 2-1-80		
A	17 ER 51048 NEW					Böck	2-25-80

00169 (7 77) fut

Änderungs-Blatt 1 von 1
Revision Sheet of

NCR

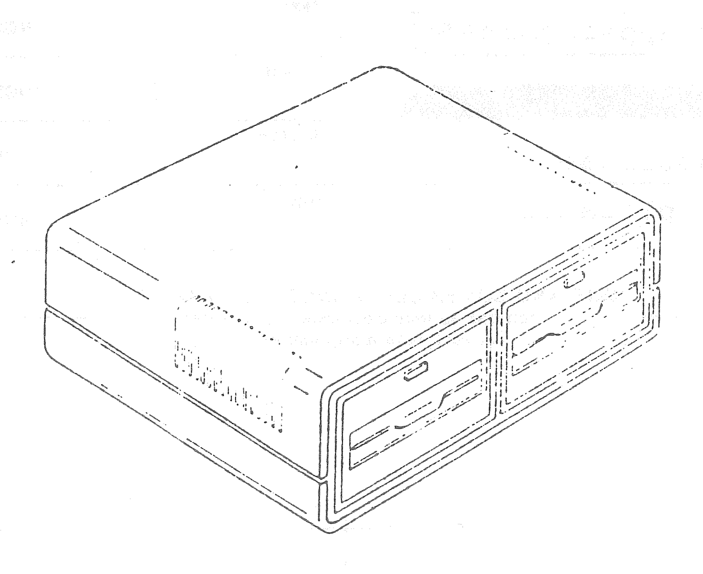
BASIC SITE PREPARATION DATA

X-1079-24

Number and Name	
	NCR 7646 Flexible Disk Recorder

DESIGN CONTROL PLANT	PREPARED BY	DATE	REVISION
Augsburg	H. Böck	2-1-80	A

LINE DRAWING OF UNIT WITH COVERS ON



MODEL NUMBERS AND DESCRIPTION OF EACH

See Page 9a

7646 - 0101 - XX90 Single Drive Dual Density Flex Disk

7646 - 0201 - XX 90 Double Drive Dual Density Flex Disk

Note: If the above units are used in the I-8140 they are designated as drive 0 and 1 or 2 and 3 resp.

NCR

Original 017-0025298

PHYSICAL DIMENSIONS

Height	6.5 INCHES	165	mm
Width	19 INCHES	483	mm
Depth	19 INCHES	483	mm

WEIGHT

Unit Max. Shipping Weight	59,5 LBS	27 kg
Unit Max. Installed Weight	51 LBS	23 (with 2 Drives) kg
Distributed Floor Loading	not applicable LBS/FT²	not applicable kg/m²
Concentrated Floor Loading	not applicable LBS/IN²	not applicable kg/mm²

FLOORING

RAISED FLOOR PERMITTED?	not applicable
SOLID FLOOR PERMITTED?	not applicable

HANDLING

Maximum Degree of Tip Allowed: 60°	☐ Casters Provided ☒ Dolly Required
Upending Possible (90°): No	RIGGING REQUIREMENTS ☐ Platform ☐ Sling ☐ Spreader Bar ☐ Hy-Lift ☒ Other
Upending Procedure: Not required	
Upending Kit Required: No	
Upending Kit Order No.	Can Installed Unit Be Moved Easily By One Person For Service? ☐ YES ☐ NO

FIELD ENGINEERING SERVICE CLEARANCE

Front	10 INCHES	254	mm
Rear	5 INCHES	127	mm
L. Side	2 INCHES	50,8	mm
R. Side	2 INCHES	50,8	mm
Top	36 INCHES	914,4	mm

DOOR AND COVER CLEARANCE ILLUSTRATION
(Includes service clearance and counter cutouts, where applicable.)

NCR

ENVIRONMENTAL REQUIREMENTS

Ref: CES 2-11-01 (Entries are product design criteria)

WORKING RANGE	PRODUCT (Check applicable column or specify in "other") 2 [ ]	3 [X]	4 [ ]	OTHER [ ]	MEDIA Type: Flexible Disk	Type	Type
TEMP RANGE (DRY BULB)	15°C to 32°C (59°F to 90°F)	10°C to 35°C (50°F to 95°F)	5°C to 50°C (40°F to 120°F)		10°C to 50°C (50°F to 120°F)		
TEMP CHANGE Max Excursion During Period of	5°C (9°F) 60 Min.	10°C (18°F) 60 Min.	10°C (18°F) 60 Min.		10°C (18°F) 60 min.		
RELATIVE HUMIDITY RANGE	35 to 60%	20 to 80%	10 to 90%		20 to 80%		
HUMIDITY CHG. Max Excursion	10% 60 Min.	10% 60 Min.	10% 60 Min.		10% 60 Min.		
TEMP GRADIENT RESTRICTIONS	5°C (9°F)	10°C (18°F)	15°C (27°F)		10°C (18°F)		

EXTREME POWER ON RANGE (PRODUCT)

Attempted operation should not cause damage to the unit. Operation may be impaired, media may be damaged, and protective devices may operate.

	CES 2-11-01 STD. Values [X]	OTHER
TEMP RANGE	8°C to 40°C (32°F to 104°F)	
TEMP CHANGE	10°C (18°F) Per Hour	
HUMIDITY RANGE	10% to 95% RH (No condensation)	

TRANSIT RANGE

	PRODUCT: CES 2-11-01 STD. Values [X]	PRODUCT: OTHER	MEDIA: DESCRIPTION		
TEMP RANGE	-40°C to 71°C (-40°F to 160°F)		-40 to 53°C (-40 to 128°F)		
TEMP CHANGE	20°C (36°F) Per Hour		20°C (36°F) per Hour		
HUMIDITY RANGE	5% to 100% RH		8% to 90%		

Notes:



Original

STORAGE RANGE

	PRODUCT		MEDIA		
	CES 2-11-01 ☐ STD. Values	Other	Type	Type	Type
TEMPERATURE RANGE	−10°C to 50°C (14°F to 120°F)		4°C to 53 (39 to 128°F)		
TEMPERATURE CHANGE	15°C (27°F) Per Hr		15°C (27°F) per Hour		
HUMIDITY RANGE	10% to 90% RH		8% to 80%		

DESIGN RANGES – BAROMETRIC PRESSURE (Ref. CES 2-11-01)

☐ RANGE 1 (Product, Including Media)

	BAROMETRIC PRESSURE	EQUIV. ALTITUDE (Ref. ONLY)
OPERATING	105kPa to 79.5kPa	Up to a maximum of 2000 metres (6560 feet)
TRANSIT	105kPa to 74.0kPa	Up to a maximum of 2500 metres (8200 feet)

MODIFICATION KIT AVAILABLE TO MEET RANGE 2? ☐ YES ☐ NO
IF YES, KIT NO.

☒ RANGE 2 (Product, Including Media, Without Modification)

	BAROMETRIC PRESSURE	EQUIV. ALTITUDE (Ref. ONLY)
OPERATING AND TRANSIT	105kPa to 69.0kPa	Up to a maximum of 3000 metres (9850 feet)

ACOUSTICAL NOISE (Ref. CES 2-10-02)

☐ CAT. 1 – Idle: 7.0 bels Operating: 7.6 bels
☐ CAT. 2 – Idle and Operating: 7.0 bels

ACTUAL/OTHER:

6.8 bel

SITE AMBIENT PARTICLE COUNT ALLOWABLE

Not specified

OPERATIONAL VIBRATION LIMITS

Not specified

NOTE:



Original 017-0025298

ELECTRICAL REQUIREMENTS

Phase ☒1 ☐3

Site Power Connections Three wire (phase,neutral & ground)

VOLTAGE/FREQUENCY DESIGN RANGES (Ref CES 2-11-02)

50 Hz NOMINAL (49.0 Hz MIN. – 50.5 Hz MAX.)

DESIGN VOLTAGES					
Nominal	Minimum	Maximum	Nominal	Minimum	Maximum
100	90	107	240	216	257
120	104	127			
127	114	136			
220	198	235			
230	207	246			

60 Hz NOMINAL (59.0 Hz MIN. – 60.6 Hz MAX.)

DESIGN VOLTAGE		
Nominal	Minimum	Maximum
100	90	107
120	104	127

POWER SUPPLY DATA

AC TRANSIENT LIMIT (Ref CES 2-11-02)

STD. Design Criteria: 50% Nominal – ½ cycle duration – once every 10 seconds

MOMENTARY POWER OUTAGE

No Data Destroyed

STATIC DISCHARGE LIMITS (Ref. CES 2-11-10)

Meets requirements of CES 2-11-10

NCR

EMI SUSCEPTIBILITY (Ref. CES 2-11-09)

Meets requirements of CES 2-11-09

EMI EMISSION (Ref. CES 2-11-08)

Meets requirements of CES 2-11-08

POWER DATA	MODEL	MODEL	MODEL	MODEL	MODEL	MODEL
	7646-0201 - 1090	7646-0201 - 2390				
NAME PLATE RATINGS						
Voltage	220	120				
Frequency	50	60				
Current	0,5	1				
Watts	65	90				
Max. Operating kva	0,066	0,115				
Max. Operating kw	0,052	0,088				
Power Factor (Lead or Lag)	.79 Lag	.77 Lag				
Btu/Hr (w)	222	306				
KCAL/Hr (w)	56	77				
CURRENT (AVERAGE OPER)	0,3	0,9				
LEG 1						
LEG 2						
LEG 3						
CURRENT (MAX. SURGE)	0,55	1,1				
LEG 1						
LEG 2						
LEG 3						
CURRENT (MAX. OPERATING)	0,45	0,95				
LEG 1						
LEG 2						
LEG 3						
UNIT CIRCUIT BREAKER	1,5	1,5				
LEG 1						
LEG 2						
LEG 3						

NCR

AC CABLE AND CONNECTOR REQUIREMENTS

A. IS DEDICATED BRANCH CIRCUIT REQUIRED? ☐ YES ☒ NO (Power from Host System)

IF YES, DEDICATED CIRCUIT MUST BE PROVIDED FROM: ☐ GEN. PURPOSE PANEL ☐ DEDICATED PANEL

B. IS INSULATED GROUNDING WIRE REQUIRED? ☒ YES ☐ NO
Same GND as Host System

IF YES, SPECIFY ACCEPTABLE GROUNDING POINTS: (Note: Insulated grounding wire must be isolated from conduit and neutrals. It's referenced only at above grd. points)
☐ Building Service Ground Point ☐ Transformer Secondary
☐ Cold Water Pipe ☐ Other ______

C. POWER CORD SUPPLIED: DOMESTIC ☒ YES ☐ NO
INTERNATIONAL ☒ YES ☐ NO

POWER CORD AWG 17 / 18 mm² 0,75 VDE / 0,82 UL LENGTH IS 4,7 ft. 1,42 metres.

D. Site circuit breaker – if installed, recommended rated capacity is: ______

E. SITE POWER CABLE
Number of conductors: ______
Connector(s) required? ☐ YES ☐ NO If "YES", specify recommended type, rating, etc. below.
Size of conductors: AWG ______ mm² ______

Describe AC cabling and connections necessary for the unit and identify all connectors. (Illustration is recommended)

NOTE: Supply voltage may be either from parent machine or separate power source

CABLE	VDE	UL/CSA
LINE	BROWN	BLACK
NEUTRAL	BLUE	WITHE
EARTH	GRN /YEL	GREEN or GRN /YEL

of Required Cables

L1 Interconnection C3274 - C7646 (Drive 0/1) : 017-0025239

L2 Interconnection C7646 (Drive 0/1) - C7646 (Drive 2/3) : 017-0025241

State Optional Cable Lengths, if available

None

Cable Constraints

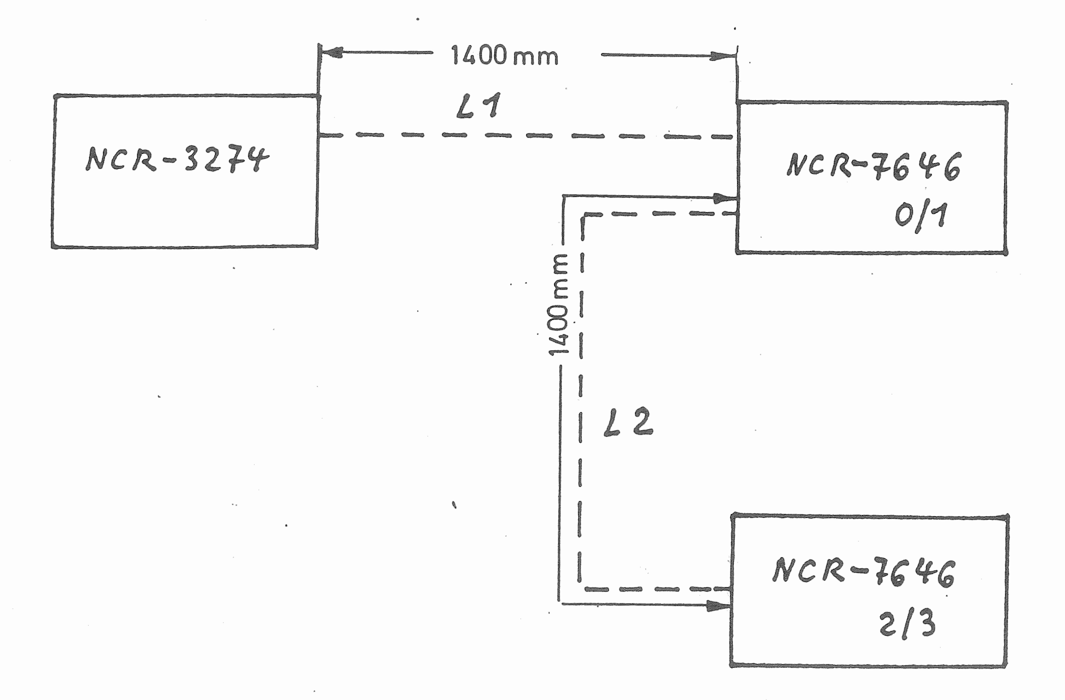
a. Length restriction

b. Routing requirements

Recommended Trunk Assignments

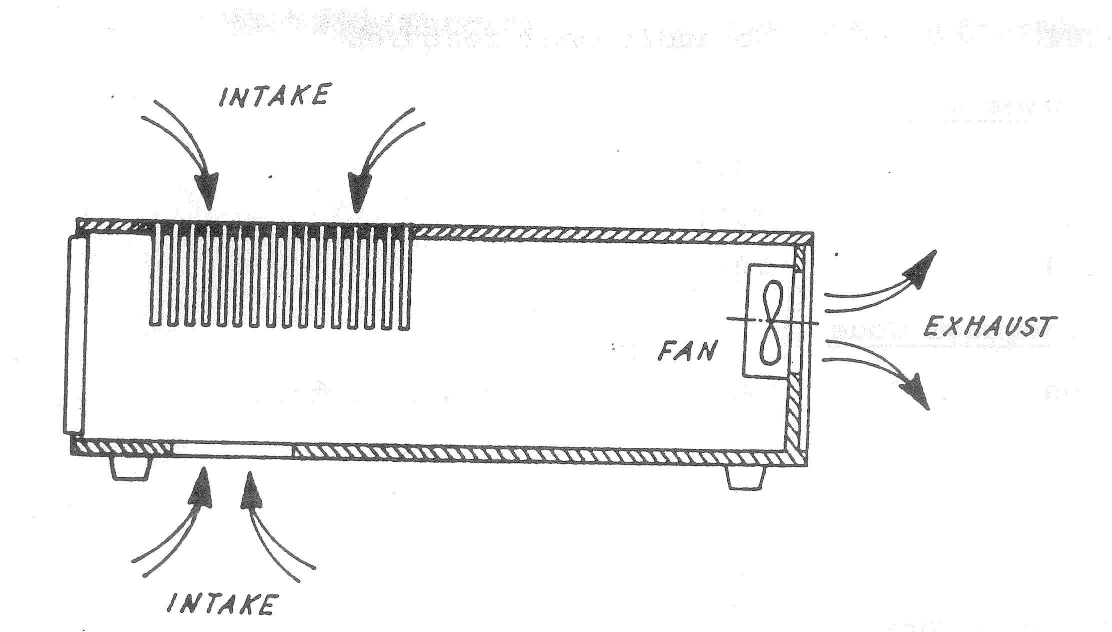
Not applicable

CABLE LENGTH AND ENTRANCE HOLES ILLUSTRATION



AIR COOLED PRODUCT DATA	
AIR FLOW	TEMP. RISE (INLET TO EXHAUST)
cfm/ 0,014 m^3s	°F/ 9 °C
cfm/ m^3s	°F/ °C

AIR FLOW ILLUSTRATION



Notes:

MODEL NUMBER DESCRIPTION

C-7646	F000
Major Model	
01	F001
02	F002
Sub-Model	
01	No additional features
Power Code	
10	F013
23	F011
44	F012
Language Code	
90	No language characteristics

Feature Content

F000	Every Unit Items
F001	Single Drive Dual Density Flexible Disk
F002	Double Drive, Dual Density Flexible Disk
F011	220V, 50Hz
F012	230V, 50Hz
F013	120V, 60Hz (includes range 100-127V, 60Hz)

C-7646 Kits

7646-K002 (603-6091069)	Single to Double Drive Upgrade Kit
7646-K003 (603-6091070)	Dual to Quad Density Upgrade Kit
7646-K005	Drive 0-1 to Drive 2-3 Interconnection Kit
7646-K092 (603-6091067)	7644 Freestanding Flex Disk Interconnection Cable